Ronald Lo – General Manager, Roche Diagnostics Hong Kong



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Ronald Lo, general manager of Roche Diagnostics Hong Kong shares some of company's advances in diagnostic disease prevention that are particularly revelant in Hong Kong, such as its recently FDA-approved HPV self-sampling in a territory where only 52 percent of women have ever done cervical screening, and in light of Hong Kong's ageing population, the early detection of Alzheimer's disease. Lo also outlines how the company is helping to address health threats like diabetes and heart failure through diagnostics, its key local partnerships, and efforts to facilitate the creation of a regulatory framework in Hong Kong that supports MedTech innovation.

Could you provide a brief introduction to Roche Diagnostics in Hong Kong?

Roche Diagnostics is one of the territory’s leading providers of in-vitro diagnostics, actively engaged across all market segments—from scientific research and clinical laboratory systems to patient self-monitoring. Our purpose is encapsulated in our motto: “Doing Now What Patients Need Next.” This reflects our commitment to a healthier future, driving us to innovate continuously and advance science. Our goal is to ensure everyone has access to the healthcare they require today and for generations to come, ultimately creating a world where we all have more time with our loved ones. That essence is what defines Roche.

Our legacy spans over almost 128 years with more than 100,000 employees, our diagnostic products were used in 29 billion tests in 2023 alone. We are a leader in healthcare research and development, investing CHF 13.2 billion last year, with a focus on discovering new medicines and diagnostics, as well as establishing data-driven insights that enhance medical practice and improve patients' lives.

In Hong Kong and Macau, we have around 120 staff and our unique combination of Diagnostics and Pharmaceuticals enables us to optimise care across the entire patient journey—from prevention and early screening to diagnosis, prognosis, stratification, therapy, and monitoring. We are at the forefront of shifting from one-size-fits-all treatments to a more personalised healthcare system that acknowledges individual differences. Because 70 percent of clinical decisions are based on lab results, Roche and the entire industry recognize the importance of diagnostics. This includes not only vendors but also lab professionals, a sentiment deeply rooted in my own experience as a former lab professional.

With Roche's significant investment in innovation and development, how do you translate these global advancements into local or regional applications, particularly in Hong Kong?

Our global and local strategies align closely around five critical areas. Firstly, ageing is a significant topic worldwide, and Hong Kong, known for its long-living population, is no exception. While this is a positive trend, it brings challenges to the healthcare system that we are actively working to address.

Next, patient-centricity has become paramount. Patients are more empowered and taking action along the patient journey and want more individual care. We place patients at the centre of everything we do. This means our efforts are directed towards creating value for patients, ensuring their needs and experiences drive our innovations.

Moving on, disease prevention is a key focus. We understand that early diagnostics and preventive measures can significantly improve patient outcomes and reduce healthcare burdens. For instance, the cervical cancer screening program in Hong Kong, aligned with the WHO's global ambition to eliminate cervical cancer by 2030, is a testament to this approach. Our HPV DNA testing, which offers greater clinical sensitivity, has been pivotal in this initiative.

Moreover, decentralised healthcare is essential for accelerating diagnostic and treatment processes. The Hong Kong Government's primary healthcare blueprint is a great example of this. Decentralising healthcare enables better patient access for timely and actionable results. This approach also speeds up diagnostics and makes healthcare more accessible. Our recent acquisition of LumiraDx's Point of care technology is an exciting example that enables us to further accelerate innovation in near-patient care.

Lastly, bioinformatics is a burgeoning field that we are heavily invested in. With advancements in technology, we now have tools to screen for 324 genes, providing comprehensive data that aids in treatment guidance and precision medicine. Our focus is on making these innovations actionable, transforming vast amounts of data into meaningful, personalized treatment options.

Together, these priorities help us address current healthcare challenges and pave the way for more efficient, patient-focused, and technologically advanced healthcare solutions.

Roche Diagnostics has a decentralized model of country management, which grants significant autonomy to general managers regardless of market size. How do you ensure alignment with the company's global strategy while addressing the unique needs and challenges of the Hong Kong market?

We observe similar healthcare trends and challenges both globally and in Hong Kong, such as ageing populations coupled with the increasing burden of chronic diseases, as well as a rise in patient centricity where individuals are more health-conscious and seek personalised care. Additionally, there is a proactive focus on disease prevention here, and the demand for decentralised healthcare services like point-of-care testing and home care is growing. Our strategy in Hong Kong aligns with these global trends and synchronises with the direction of the Hong Kong Government, particularly concerning the Hospital Authority (HA) development and the ageing demographic, with an emphasis on primary healthcare.

To address these needs, we have been implementing total lab automation solutions to enable smart laboratories that can more effectively and efficiently manage increasing workloads. We are also enhancing point-of-care and near-patient care systems to better support primary healthcare, alongside the rollout of advanced medical assays tailored to the ageing population. Our vision centres on making a positive impact on patients' lives while ensuring that healthcare remains affordable.

Furthermore, our globally distributed and interconnected teams enable us to collaborate with global and regional functions, allowing us to leverage best practices and resources effectively. We also recognise that diversity is vital; inclusion helps us understand the varied healthcare needs of different populations, and by fostering a diverse workplace, we can develop truly innovative solutions for our patients and the wider community.

Post-pandemic, is there a wider appreciation of the importance of prevention through diagnostics in Hong Kong? How is Roche Diagnostics working to move the dial on this important issue?

The increasing burden of diseases and rapidly ageing populations are placing significant pressure on healthcare systems. Laboratories, often under strain and short-staffed, are expected to handle a growing number of patient samples, deliver results promptly, and improve patient outcomes. As society grapples with limited resources and rising healthcare costs, there is an urgent need to enhance patient outcomes.

Our recent FDA approval for HPV self-sampling positions us as the first in the market, providing an accessible screening option that aligns with the WHO’s goal of eliminating cervical cancer by 2030. In Hong Kong, there is only 52 percent of women who have ever done cervical screening. In our recent Asia Pacific Women’s Health survey, which revealed that almost 1/3 of women in Hong Kong perceive the cervical screening experience as shameful or embarrassing. By facilitating self-sampling, we aim to reduce barriers and support women to prioritize their health amidst their busy lives, ultimately improving early detection and treatment outcomes, thereby preventing most deaths from cervical cancer.

Additionally, we focus on other areas of diagnostics innovation, such as mass spectrometry and digital AI solutions that enhance the management of diseases like hepatitis and liver cancer. In addition to our cervical cancer self-sampling initiative, Roche is also dedicated to addressing unmet needs in other critical areas, such as Alzheimer’s disease (AD). AD accounts for 60-80% of dementia cases, making it one of the most common neurodegenerative disorders among the elderly. In Hong Kong, one in ten individuals aged 70 or above suffers from dementia, a figure that rises to one in three for those aged 85 and older. With projections estimating around 280,000 dementia patients in Hong Kong by 2036, early and accurate diagnosis becomes vital.

Identifying Alzheimer’s disease at an earlier stage can make patients eligible for new therapies specifically designed for the initial phases of the condition. This not only provides patients with

opportunities to implement preventative measures but also helps them maintain independence and improve their overall quality of life. Timely diagnoses can significantly reduce the associated medical and long-term care costs, benefiting both patients and the healthcare system.

Roche's Cerebrospinal fluid (CSF) assay plays a crucial role in facilitating earlier AD diagnosis, thereby enhancing patient care. We currently have investigational therapies in our pipeline, some are in Phase II testing. We recognize that early diagnosis is essential for maximizing patient benefits and improving societal outcomes. Beyond Alzheimer's disease, we also focus on high medical value assays for other diseases, including Type 2 diabetes (using NT-proBNP), liver cancer (PIVKA-II), and respiratory illnesses (utilizing PCR methods for multiplex detection).

Collaboration is key in our approach. We work with various stakeholders to broaden access to our diagnostic solutions, ensuring a seamless patient journey.

Diagnostics also play a critical role in addressing serious health threats like chronic diseases. What are some of the key healthcare issues specific to Hong Kong that Roche Diagnostics is working to help solve?

In Hong Kong, we face significant healthcare challenges, particularly in the areas of diabetes, heart failure, and liver cancer.

Diabetes affects around 700,000 individuals in Hong Kong, which is approximately 10 percent of the population. The prevalence varies, with only 2 percent of those under 35 affected, compared to over 20% of those aged 65 and older. To address the daily management unmet needs of diabetes patients, we are set to launch continuous glucose monitoring (CGM) systems equipped with sensors and apps. This innovation with predictive features will help manage fears surrounding hypoglycaemia and improve overall patient quality of life.

Heart failure is another critical issue, impacting about 70,000 patients in Hong Kong. With over 50 percent mortality within five years of diagnosis, timely intervention is essential. Additionally, heart failure leads to more than 20,000 hospitalisations each year. Patients with Type 2 diabetes are particularly at risk, as heart failure and peripheral arterial disease are common complications. For both heart failure and T2DM, NT-proBNP is recognized as the gold standard biomarker that aids in clinical decision-making. This biomarker is crucial for risk assessment, helping to identify T2DM patients who may be at an increased risk of unplanned cardiovascular hospitalization or mortality within the following year. Moreover, NT-proBNP is instrumental in diagnosing heart failure,

assessing disease severity upon admission, and supporting discharge planning within hospital settings.

Finally, liver cancer, which ranks as the fifth most common cancer in Hong Kong, presents a major challenge. In 2021, over 1,700 new cases were reported, with the majority diagnosed at late stages. A significant number of cases arise from chronic liver disease, notably Hepatitis B, which affects about 410,000 people in the region. The use of the PIVKA-II biomarker can significantly enhance early detection of liver cancer, increasing the likelihood of curative treatment and improving survival rates. Additionally, we are developing a new marker, PRO-C3. This marker will help in the early detection and management of fatty liver disease, particularly Non-Alcoholic Steatohepatitis (NASH). We also collaborate with various disease management groups to offer free testing and support to the community.

Last year, Roche Diagnostics launched 34 new products globally, including tests, platforms, and digital solutions. How well is Hong Kong able to absorb these latest innovations?

Hong Kong is well-positioned to absorb these latest innovations due to its robust healthcare infrastructure and the increasing demand for advanced diagnostic solutions. For instance, we have introduced various cutting-edge technologies, such as Mass Spectrometry and digital algorithms like the GAAD score, which personalizes liver cancer detection through patient data and biomarker integration. Our high-value assays targeting conditions such as Alzheimer’s disease, Type 2 diabetes using NT-proBNP, and PIVKA-II for liver cancer further exemplify our commitment to addressing critical health issues in the region.

Roche Diagnostics has a continued focus on digital innovation, and the COVID-19 pandemic has accelerated the adoption of digital solutions. Last year, we launched several tools that enable better and faster clinical decision-making, including enhanced digital connectivity in laboratories and point-of-care (POC) solutions. Additionally, our PD-L1 algorithm aids pathologists by facilitating quicker assessments of PD-L1 status in lung cancer patients.

How is Roche Diagnostics engaging with new partners in Hong Kong to improve healthcare outcomes, and what key initiatives are you involved in?

Collaboration is indeed at the heart of innovation at Roche. The FibriCheck project is one of the earliest innovation projects in Asia Pacific. We partnered with HKT, DrGo and The Hong Kong Society for Rehabilitation. This atrial fibrillation screening solution has proven impactful, recruiting around 3,000 participants from the general public. Remarkably, 15 individuals were identified with atrial fibrillation through FibriCheck, with eight being newly diagnosed. This highlights the critical importance of early screening and cross-industry collaboration.

Another significant initiative is the Hong Kong Women's Check-Up Week, which we launched around Mother's Day in May this year. Collaborating with various organisations, including Christian Action, FWD Hong Kong, The Karen Leung Foundation, Maison Kayser, Tatler Asia and Trinity Medical Centre, we aimed to raise awareness about women's health and cervical cancer screening. Our survey revealed that women often deprioritise their health. The Women's Check-Up Week is a movement to promote education and support, celebrating the resilience and strength of women and acknowledging the need for them to put their health first, even though they have others to look after or support. To further support underprivileged women, we provided 100 free HPV tests, encouraging them to take proactive steps regarding their health.

In addition to women's health, liver disease is also our priority. We are collaborating with healthcare professionals, academia, and patient groups and work with them as a Liver Disease Management Concern Group. This group aims to raise public awareness about HBV screening and liver cancer surveillance, while advocating for comprehensive liver disease management proposals by engaging policymakers.

Lastly, our partnership with the Hong Kong Science and Technology Parks Corporation (HKSTP) is crucial as we work to build a robust healthcare ecosystem that fosters innovation. This collaboration aims to create an environment conducive to data exchange and supports the incubation of start-ups, facilitating faster market access and wider outreach.

Through these initiatives, Roche is actively engaging with various stakeholders to drive meaningful changes in healthcare across Hong Kong.

As Hong Kong looks to develop its innovation and technology output and foster its own healthtech start-ups, what do you see as Roche's role in this effort? What impact do you hope the Roche/HKSTP partnership will have?

The diagnostic industry is increasingly stepping into a more visible and active role, and Roche Diagnostics Hong Kong is committed to this transformation. We are dedicating our efforts to partnering with a diverse array of stakeholders, including influencers, policymakers, and administrators, through our collaboration with HKSTP. Our goal is to facilitate the creation of a comprehensive and accelerated regulatory framework that supports the adoption of innovations in MedTech, healthtech, and biotech.

A key aspect of this initiative is our focus on data collaboration. We aim to unlock the value of data within the ecosystem, partnering closely with HKSTP to share selected anonymised data within a clearly defined scope. We also look forward to engaging actively in events with HKSTP that promote data sharing and collaboration, establishing mutually agreed-upon terms between our parties.

In support of the co-incubation programme for start-ups, we are committed to providing mentorship in scientific, strategic, and marketing areas. We will help connect these start-ups with stakeholders, including healthcare professionals and academic institutions, thus broadening their reach across the Asia-Pacific region.

The impact of the Roche/HKSTP partnership is significant. We aim to strengthen Hong Kong’s position as a regional biomedical hub and a leader in life and health sciences. In the long term, we envision developing the Greater Bay Area into a centre of excellence for healthcare innovation. Our aspiration is for Hong Kong to emerge as a pioneering hub, where the adoption of biomedical innovations matches or even faster than advanced countries in the Asia-Pacific, such as Australia, South Korea, and Japan.

What are going to be your focus areas in the coming years?

Moving forward, Roche Diagnostics will continue to focus on areas that have the greatest potential to impact healthcare systems, such as Alzheimer’s disease, cervical cancer, liver diseases, cardiovascular conditions, and diabetes. We are committed to exploring new partnerships that leverage shared strengths to drive innovation in these fields.

Additionally, the public’s understanding of diagnostics has evolved, especially post-COVID. We are launching innovative respiratory tests to address upper respiratory tract issues, providing actionable results for key pathogens.

Lastly, our sustainability efforts remain a priority. We are dedicated to supporting our people in leading healthier lives, which in turn contributes to a healthier planet. This holistic approach allows us to create a world where we can all enjoy more time with our loved ones.

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